(Edited November 26, 2003)

Fill-in-the-Blank

POLLUTION PREVENTION PLAN

November 2003

POLLUTION PREVENTION PLAN

For

Facility Name: _____
Address: _____

Facility ID number: _____

Facility SIC: _____

Base Year: _____

This Plan Covers Years: _____

Original Date of Plan: _____

Revision Date (if any): _____

POLLUTION PREVENTION PLAN

TABLE OF CONTENTS

INTRODUCTION

Note: It is recommended that a narrative description of the facility, its products and any other information pertinent to future pollution prevention planning be included in the introduction to the Plan. The Introduction should also include, as inserts or addendum on replacement pages, a summary of any Plan revisions that may have been made during the year.

1.0 GENERAL INFORMATION

2.0 PERSONNEL INFORMATION AND CERTIFICATIONS

Personnel Information

Facility Name:
Facility Phone Number:
Physical Address:

Mailing Address:

Owner / Operator of the Facility:
Name:
Title:
Phone: ( ) -

Highest Ranking Corporate Official at the Facility:
Name:
Title:
Phone: ( ) -

Highest Ranking Corporate Official with Direct Operating Responsibility:
Name:
Title:
Phone: ( ) -

Non-Management Employee (Union) Representative:
Name:
Title:
Phone: ( ) -

Certifications

Highest ranking corporate official at facility with direct operating responsibility:

"I certify under penalty of law that I have read the Pollution Prevention Plan and that the Pollution Prevention Plan is true, accurate and complete to the best of my knowledge."

_____ _____

Name, Title Date

Highest ranking corporate official at Facility:

"I certify under penalty of law that I am familiar with the Pollution Prevention Plan and that it is the corporate policy of this industrial facility to achieve the goals of the Pollution Prevention Plan."

_____ _____

Name, Title Date

3.0 FACILITY-LEVEL INFORMATION

Covered Hazardous Substances:

The following TRI hazardous substances are used at this facility:

Hazardous Substance Name	CAS Number	Reporting Threshold

Facility–Level Materials Accounting Information:

Note: A complete *facility level* materials accounting is required for all hazardous substances used at the facility which exceed the reporting threshold.

One way to satisfy this requirement is to attach a copy of your facility's annual RPPR. If you chose this option you will have to calculate facility level **"USE"** of hazardous substances as this quantity is required to be in the Plan but is not reported on the RPPR (see the box below for instruction on how to calculate "USE").

Another way to display this information is to complete **Table 1** below. **Table 1** has an advantage over the RPPR in that it allows you to easily track and compare **"USE"** and **NPO** from subsequent years.

"USE" can be calculated two ways:

USE = INPUTS – ENDING INVENTORY

or

USE = Consumed + Shipped (as/in product) + NPO

Appendix A "Calculation Tables" *provides additional guidance for calculating USE, NPO and INPUT / OUTPUT balances.*

TABLE 1: FACILITY-LEVEL INVENTORY SUMMARY.

Hazardous Substance:						
Reporting Threshold:				**CAS Number:**		
	Base Year	1st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
	2000	2001	2002	2003	2004	2005
INPUTS: (pounds)						
Starting inventory						
Produced onsite						
Brought onsite						
Recycled out of process/re-used onsite						
OUTPUTS: (pounds)						
Consumed onsite						
Shipped offsite as/in product						
Ending inventory						
Total NPO						
Recycled outside of process onsite						
Destroyed through onsite treatment						
Destroyed through onsite energy recovery						
Release to air through stack emissions						
Release to air through fugitive emissions						
Discharged to POTW						
Discharged to surface waters						
Discharge to ground water						
Onsite land disposal						
Transferred offsite						
USE: (pounds)						

4.0 PROCESS-LEVEL INFORMATION AND INVENTORY DATA

Process–Level Materials Accounting Information:

Note: *Process level* materials accounting data is required for ***each*** *TRI* ***hazardous substance*** used in ***each process*** at the facility.

The first Step is to identify and provide a description of each process which uses a covered hazardous substance. One way of presenting this information is to fill in Table P1 below. Another way to satisfy this requirement is to provide a narrative description of each process. 7:1K-4.3©2

The ***Pollution Prevention Process Level Data Worksheet (P2-115)*** shown below is required to be completed and included in your Pollution Prevention Plan. 7:1K-4.3(b)3-4

Two additional items not listed on the P2-115 are also required to be contained in your Plan.

1) An identification / description of the product(s), co-product(s) and/or intermediate product(s) produced at the facility.
2) If processes were grouped – a short explanation of why your facility chose to group the processes.

Calculating "USE" and NPO on the P2-115:

The following calculations are used to derive "USE" and NPO for the P2-115:

USE = Consumed + Shipped (as/in product) + NPO

(On the P2-115 shown below "USE" is the sum of the items shown in red.)

NPO = Calculated by summing the data elements shown in blue on the form below
(i.e., from "*Recycled out of process*" down to *"End. Inv. As NPO – Beg. Inv. as NPO."*)

Remember to **fill out one P2-115 for each hazardous substance used in each process**.

POLLUTION PREVENTION PROCESS-LEVEL DATA WORKSHEETS (P2-115's)

POLLUTION PREVENTION PROCESS LEVEL DATA WORKSHEET (P2-115)
Base Year _____

PROCESS I.D. (from your Plan Summary) _____

UNITS OF PRODUCTION (e.g. type of widget, lbs. of chemical, ft^2 of product) _____

Is process targeted? (Y/N)___ Is this a grouped process? (Y/N)_____

HAZARDOUS SUBSTANCE:	**CAS No.**					
	Base Year	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Production quantity						
USE (pounds)						
Consumed						
Shipped off-site as (or in) product						
NPO (pounds)						
Recycled out of process						
Destroyed: on site treatment						
Destroyed: on site energy recovery						
Stack air emissions						
Fugitive air emissions						
Discharge to potws						
Discharge to groundwater						
Discharge to surface waters						
On site land disposal						
Transferred off site						
End. Inv. As NPO – Beg. Inv. as NPO						
P2 techniques used in given year (use the code(s) from the Appendix of the RPPR Instructions)						
Was this process discontinued or sent off site in given year? (Y/N)						
Did facility make process change(s) that triggered Plan modification? (Y/N)						
Was facility's P2 progress (targeted process only) less than anticipated? (Y/N) (Attach explanation if Y.)						

5.0 HAZARDOUS WASTE GENERATION, TREATMENT, STORAGE AND DISPOSAL

Note:
The Rules (N.J.A.C. 7:1K-4.3(b)5) require that information on hazardous **"waste"** generation, treatment, storage and disposal and amounts of waste generated for each process be included in the Plan. This includes **all "hazardous waste,"** not just wastes containing TRI hazardous **"substances"** regulated under the P2 Program.

"Hazardous Substance" refers to TRI substances and is defined by the Pollution Prevention Act to mean any substance on the list established by the United States Environmental Protection Agency for reporting pursuant to 42 U.S.C. §11023, and any other substance which the Department defines as a hazardous substance for the purposes of the Act pursuant to N.J.A.C. 7:1K-3.5.

"Hazardous waste" refers to RCRA regulated waste and is defined by the Pollution Prevention Act to be any solid waste defined as hazardous by the Department pursuant to the hazardous waste statute (N.J.S.A. 13:1E-1 et seq.).

Note: Your RCRA Biennial Hazardous Waste Report probably includes much of this data, if it is prepared in the same year as the base year of the Pollution Prevention Plan. However, these biennial reports are due in odd years (1997, 1999, 2001, etc.), so should only be used if these are also your planning base years.

Note: Completion of this section with all hazardous wastes meets the waste minimization planning requirements under RCRA. All hazardous wastes must be reported, whether or not they contain a covered substance under pollution prevention planning.

Table 5i Facility-Level Inventory of Hazardous Waste

{Note: this table contains information covered under 7:1K-4.3(b)5i-ii }

Name of covered substance in waste:				
CAS No.				
Hazardous waste Category:				
Amount generated:				
Amount treated outside of a production process:				
Amount stored outside of a production process:				
Amount disposed outside of a production process:				
Address of off-site TSD facility receiving the waste:				
Description of the type of treatment method used at each TSD:				
Amount recycled onsite:				
Amount recycled offsite:				

Table 5ii Process-Level Inventory of Hazardous Waste

{Note: this table contains information covered under 7:1K-4.3(b)5iii }

Process Name:	Hazardous Waste Type:	Quantity Generated (lbs.):

6.0 PART IA COST DATA (*"the cost of doing business as usual"*) is located in Table C-1 of section 9.0 along with the Part II cost analysis (*"the costs or savings associated with implementing a P2 option"*).

PART II OF THE PLAN
N.J.A.C.7:1K-4.5

7.0 SOURCE-LEVEL NPO DATA

Table S1 Source-Level Inventory of NPO:
{Note: this table contains information covered under 7:1K-4.5(a)2 }

Process Name:	Source of NPO:	Quantity Generated (lbs.):

8.0 TARGETING

TARGETING OF SOURCES/PROCESSES (N.J.A.C.7:1K-4.4)

Note: The Rules allow a facility to concentrate pollution prevention resources on a process or processes which account for a significant amount of "**USE"**, "**NPO"** or "**releases"** at the facility (a significant amount is defined to be at least 90%).

Targeting is not required and can often lead to confusion as to what information needs to be contained in the Pollution Prevention Plan and/or reported to the NJDEP. Targeting will be of no help to facilities that have only one process; however, it may prove beneficial to facilities with numerous processes.

7:1K-4.4

Again there are several ways to present this information. One way to satisfy this requirement is to provide a narrative description of your targeted processes which explains why you targeted each processes and indicate the percent of USE, NPO or releases the processes cover. Another way of presenting this information is to fill in Table T1 below.

Table T1 Targeted Process Justification

{Note: this table contains information covered under 7:1K-4.4(b) }

Process Name:	Targeted ? (Y/N)	Basis for Targeting: (USE, NPO or Releases)	Percent covered by this process:

9.0 POLLUTION PREVENTION OPTIONS

Identifying Options:

Note: Facilities are required to list and evaluate potential pollution prevention options which may reduce the use and or generation of hazardous substances. However, the rules do not require facilities to implement any of the options identified in the Pollution Prevention Plan, implementation is strictly voluntary. The rule is designed to help facilities assemble data and identify ways to prevent pollution and increase efficiency, which in turn may lead to cost savings. The intent is that if facilities identified ways to reduce waste and save money they would implement the options on their own accord.

There are three steps to follow:

1) List all potential options.
2) Perform a *Technical Analysis* of each option.
3) Perform a *Financial Analysis* of technically feasible options.

The first thing to do is list all available options, not just the options you plan to implement. Listing all options allows you to document for future Plan revisions (*and for the benefit of the next person assigned to prepare or update the Plan*) all options considered and will allow you to disregard the option if future conditions remain the same or revisit the option if conditions at the facility have changed (e.g., the price of a raw material becomes too expensive, new technology becomes affordable, etc.). This information may be presented as a narrative or in tabular form (see Table O-1 below).

Option Identification

Table O-1 Description of Pollution Prevention Options:
{Note: this table contains information covered under 7:1K-4.5(a)4 }

Option Number:	Description of Option:	Processes Affected:	Sources Affected:

Technical Analysis:

Note:
A ***Technical Analysis*** is performed on all options and is simply a discussion as to whether or not the option is possible to implement? Depending on the option, some technical analyses may be very descriptive and detailed while other may be short and concise. In any case, the cost of implementation is NOT considered in the *Technical Analysis*. The *Technical Analysis* simply answers the question "**is the option possible to implement?"** A narrative description is usually the easiest way to present this information, however, Table O-2 is provided below for those who prefer to present the information in a tabular format.

Technical Analysis of Pollution Prevention Options

Table O-2 Technical Analysis of Pollution Prevention Options:
{Note: this table contains information covered under 7:1K-4.5(a)5i }

Option Number:	Is it Feasible? (Y/N)	Will it be implemented in the next five years (Y/N)	Description of Option:	Explanation:

Financial Analysis:

Note:
A **Part II *Financial Analysis*** (*"the costs or savings associated with implementing a P2 option"*) is only required for those options which are found to be technically feasible. The *Financial Analysis* compares the cost of using, generating, and releasing hazardous substances, required under 7:1K-4.3(b)6, with the cost or saving which may be incurred through the implementation of a particular pollution prevention option. This type of information is best displayed in tabular form. The cost information required in 7:1K-4.3(b)6 (Part IA - *"the cost of doing business as usual")* and 7:1K-4.5(a)5ii (Part II - *"the costs or savings associated with implementing a P2 option"*) have been combined in Table C-1, below. Facilities may wish to include other costs pertinent to their particular operation in order to fully understand the cost / benefits associated with using a hazardous substance or implementing a P2 option

Table C-1 Financial Analysis of Pollution Prevention Options:

{Note: this table contains information covered under 7:1K-4.3.(b)6 and 4.5(a)5ii }

Option Number:		
	Cost associated with using hazardous substances. (**"Part 1A cost data"**)	Cost or savings associated with the implementation of P2 option. (**"Part II cost analysis"**)
OSHA compliance		
Consultants fees		
Storage & handling		
Monitor, track, report		
Treatment		
Transport. & disposal		
Permit fees		
Liability insurance		
Overhead		
Raw material purchase		
Operations & maintenance savings		
Capital costs		
R&D		
Training		
Other Costs		
Total		

Selection of Pollution Prevention Options

Table O-3 below summarizes which pollution prevention options your facility intends to implement over the course of the five-year planning cycle.

Table O-3 Pollution Prevention Options which will be Implemented during this five year Planning Cycle:

{Note: this table contains information covered under 7:1K-4.5(a)6 & 11 }

Option Number:	Description of Option:	Is it Feasible? (Y/N)	Explanation:

10.0 POLLUTION PREVENTION GOALS

The rules require that the Plan provide the following:

Five-year Facility-level "USE" and NPO reduction goals

Targeted process-level "USE" and NPO per unit product.

The first step is to calculate source-level data on expected reductions in targeted processes due to the implementation of pollution prevention options (see Table G-1).

The next step is to sum the targeted process-level expected reductions which will yield projected facility-level reductions for each hazardous substance as shown (see Table G-2). Percent goals can then be calculated for the entire facility (see Table G-3).

The data in Table G-4 is then used to perform a per-unit-of-product analysis, which then is used to calculate per-unit-of-product goals in percentages for each process as required.

Table G-1 Expected Source-Level USE and NPO Reductions (lbs):
{Note: this table contains information covered under 7:1K-4.5(a)9 & 10 }

Source:	Option No:	Expected USE Reduction (lbs)	Expected NPO Reduction (lbs)

Table G-2 Projected Process-Level USE and NPO reduction goals in pounds and percent:

Process:						
Hazardous Substance:						
Original NPO (lbs)						
Reduction (lbs)						
New NPO (lbs)						
%NPO Goal						
Original USE						
Reduction (lbs)						
New USE (lbs)						
% USE Goal						

Table G-3 Projected Facility-Level USE and NPO reduction goals in pounds and percent:

	Quantity of hazardous substance (lbs):					
Hazardous Substance:						
Original NPO (lbs)						
Reduction (lbs)						
New NPO (lbs)						
%NPO Goal						
Original USE (lbs)						
Reduction (lbs)						
New USE (lbs)						
% USE Goal						

Facility
% NPO Goal = $\frac{\text{Original NPO - New NPO}}{\text{Original NPO}} \times 100$

Facility
% Use Goal = $\frac{\text{Original Use - New Use}}{\text{Original Use}} \times 100$

Table G-4 Process-Level Analysis of USE and NPO per unit of product
for each hazardous substance (calculated from P2-115 data):

{Note: this table contains information covered under 7:1K-4.5(a)7 & 8 }

Process:						
	Hazardous substances:					
Unit of Product						
Orig. NPO/ Unit Of Product.						
Reduction						
New NPO/ Unit of Product						
%NPO Goal						
Orig. USE/Unit of Product						
Reduction						
New USE/Unit of Product						
% USE Goal						

11.0 EXPECTED IMPACT OF IMPLEMENTED OPTIONS ON POST-TREATMENT MULTI-MEDIA RELEASES

Table I-1 Expected Multi-media Releases (lbs)

	Media:	**Hazardous Substance:**				
Base Year:	Air					
	Waste					
	Water					
Fifth Year:	Air					
	Waste					
	Water					
% Reduction:	Air					
	Waste					
	Water					

INFORMATION REQUIRED IN THE POLLUTION PREVENTION PROGRESS REPORT (sections C & D of the RPPR)

PART IB OF THE PLAN (N.J.A.C.7:1K-4.3 (c))

12.0 FACILITY-LEVEL INFORMATION ON REDUCTIONS

The tables below indicate yearly facility-level information, on reductions in Use and NPO from base year through the fifth year of the planning cycle. In each Table the first two columns are the actual Use and NPO amounts independent of production. The Actual Use and NPO reductions (%) take into account the Production Index as calculated in the RPPR instructions. Calculations are given on the following two pages

Base Year

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

First Year of Plan

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

First Year Total USE Based on Base Year Production Efficiency

From current year From base year

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Second Year of Plan

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Second Year Total USE Based on Base Year Production Efficiency

From current year From base year

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Third Year of Plan

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Third Year Total USE Based on Base Year Production Efficiency

From current year From base year

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Forth Year of Plan

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Forth Year Total USE Based on Base Year Production Efficiency

From current year From base year

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Fifth Year of Plan

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

Fifth Year Total USE Based on Base Year Production Efficiency

From current year From base year

Process	# of Units of Product	Use Per Unit of Product	Total Use (Pounds)
Facility-wide Total:			

13.0 **Appendix A – Calculation Tables:**